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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,707	01/16/2004	Sheng-Nan Lu	CFP-015520 (15745/432)	8441
23595	7590	10/11/2005	EXAMINER	
NIKOLAI & MERSEREAU, P.A. 900 SECOND AVENUE SOUTH SUITE 820 MINNEAPOLIS, MN 55402			KYLE, MICHAEL J	
			ART UNIT	PAPER NUMBER
			3677	

DATE MAILED: 10/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

HC  
**Office Action Summary**

Application No.

10/759,707

Applicant(s)

LU ET AL

Examiner

Michael J. Kyle

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 4-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art ("APA", shown in figures 5 and 6). APA discloses a hinge member having a seat (32) with lateral and upright portions. The upright portion has a hole (as shown in figure 5) and a first positioning member with a recess (on 41, shown in figure 6). APA also discloses a pintle (33) with a non-circular cross section extending through the hole and having an external thread at a first end. A second end of the pintle has a connecting part (31). A nut (on left end of pintle in figure 6) is engaged with the external thread. APA further discloses a fastener assembly (40) comprising a positioning member (42) provided between the upright portion (11) and the nut (80). The positioning member (42) has a non-circular cross section corresponding to the pintle and a protrusion (see figure 6, interface between 41 and 42) engaged in the recess (on 41) in a closed status of a notebook computer. A resilient member (43) is provided outside the pintle and between the positioning member (42) and the nut. The protrusion has an outermost curved surface in contact with innermost curved surfaces of the recess. Because the first positioning member 41 is fixedly attached to the upright portion of the seat, examiner considers it to be part of the upright portion. However, to more clearly present this, examiner has presented the rejection under 35 U.S.C. 103(a) as follows.

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3. In APA, the first positioning disk 41 includes a recess. This disk is attached to the upright portion of the seat 32. The claim requires the upright portion to be a recess. This appears to be making the two parts of the prior art into a single, monolithic piece. It has been held that making multiple pieces integral within the level of one having ordinary skill in the art, specifically that "the use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious engineering choice." In re Larson, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify APA such that the first positioning disk and the upright portion of the seat are integral with each other, as a monolithic piece. This would result in the upright portion having the claimed recesses, which exist on the first positioning disk. The

4. With respect to claim 2, the upright portion of APA includes two recesses (on either side of 411) diametrically opposite each other about an aperture. The positioning member (42) includes two protrusions formed at two diametrically opposite sides of the aperture and respectively positioned in the recesses.

5. With respect to claims 6 and 7, APA discloses a first washer (see figure 5, immediately to the right of the upright part, along the rotational axis) between an upright portion and the connection part. APA also shows a second washer (figure 5, between 43 and the nut) between the resilient member (60) and the nut (80).

7. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over APA in view of Ona (U.S. Patent No. 5,966,776). APA shows a spring as the resilient member, not elastic dished disks, as claimed.

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8. Ona teaches a hinge assembly with a spring biased positioning member that may be biased by either a spring, or disc springs (column 10, lines 35-37), thereby establishing equivalence between the two resilient members. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify APA, by using disc springs rather than a coil spring, as these two resilient means are equivalent and interchangeable within the art. Additionally, it is considered within the level of one having ordinary skill in the art to modify the opening the disks to be non-circular as no new or unexpected result arises from such a modification. Regardless of the shape of the opening, the disks are still compressed into contact with each other to frictionally resist the turning of the hinge. It would have been obvious to one having ordinary skill in the art at the time of the invention to make the openings of the disk non-circular, as no new or unexpected result is produced. Additionally, examiner cannot find any criticality to this limitation in the specification.

9. With respect to claim 5, APA does not show the dished disks arranged to have an axial thickness gradually increased from the thickness of the previous elastic disk as the arrangement of the elastic disks extends from the positioning member to the nut. However, examiner cannot find any criticality in the specification for this limitation. As such, it is considered that one having ordinary skill in the art would know to arrange this disks as claimed, as a new or unexpected result is not produced, and there is no clear advantage to such an arrangement. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify APA, such that the elastic disks are arranged to have an axial thickness gradually increased from the thickness of the previous elastic disk as the arrangement of the elastic disks

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extends from the positioning member to the nut because no new or unexpected result is produced.

***Response to Arguments***

10. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection. Claim 1 is now rejected by the applicant's admitted prior art. (APA), under 35 U.S.C. 103(a).

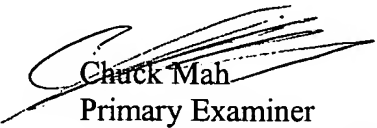
***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Kyle whose telephone number is 571-272-7057. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mk

  
Chuck Mah  
Primary Examiner  
Technology Center 3600